



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY CANADA INC.

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CONSTRUCTION MATERIALS TESTING

Valid To: October 31, 2024

Certificate Number: 6524.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory for the following tests on Building Products:

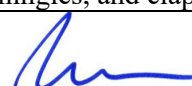
<u>Test Method:</u>	<u>Test Description:</u>
ASTM C39	Standard test method for compressive strength of cylindrical concrete specimens
CSSBI S2	Criteria for the testing of composite slabs
SDI T-CD	Test Standard for composite steel deck-slabs
Building Envelope & Fenestration:	
AAMA/WDMA/CSA 101/I.S.2/A440 (NAFS)	Specification for windows, doors, and skylights
A440S1	Canadian Supplement to AAMA/WDMA/CSA 101/I.S.2/A440 (NAFS) Specification for windows, doors, and skylights
AAMA 501.1	Standard test method for water penetration of windows, curtain walls and doors using dynamic pressure
AAMA 501.5	Test method for thermal cycling of exterior walls
AAMA 503 ¹	Voluntary specification for field testing of newly installed storefronts, curtain walls and sloped glazing systems (metal curtain wall section 1 the following tests only; wind loads, dead loads, uniform structural loads, air leakage, water penetration, water spray test without air pressure difference)
AAMA 508	Voluntary test method and specification for pressure equalized rain screen wall cladding systems
AAMA 509	Voluntary test and classification method for drained and back ventilated rain screen wall cladding systems
AAMA 711	Voluntary specification for self-adhering Flashing used for installation of exterior wall fenestration products
AAMA 714	Voluntary specification for liquid applied Flashing used to create a water-resistive seal around exterior wall openings in buildings
AAMA 910	Voluntary "life cycle" specifications and test methods for aw class architectural windows and doors
AAMA 920	Specification for operating cycle performance of active side-hinged exterior door slabs

<u>Test Method:</u>	<u>Test Description:</u>
AAMA 1304	Voluntary specification for forced entry resistance of side-hinged door systems
AAMA 1503	Voluntary test method for thermal transmittance and condensation resistance of windows, doors and glazed wall sections (CRF only)
ANSI Z97.1	Standard for safety glazing materials used in buildings safety performance specifications and methods of test (except hardness and natural weathering)
ASTM C1201/C1201M	Standard test method for structural performance of exterior dimension stone cladding systems by uniform static air pressure difference
ASTM C1363	Standard test method for thermal performance of building materials and envelope assemblies by means of a hot box apparatus (except C177, C1114, C236 and C976, ISO 12567, ISO 8990)
ASTM C1401	Standard guide for structural sealant glazing (except C99, C510, C719, C794, C880, C1087, C1135, C1248, C1253, C1265, C1294, D2203)
ASTM E72	Standard test methods of conducting strength tests of panels for building construction
ASTM E283	Standard test method for determining rate of air leakage through exterior windows, curtain walls, and doors under specified pressure differences across the specimen
ASTM E330/E330M	Standard test method for structural performance of exterior windows, doors, skylights and curtain walls by uniform static air pressure difference (except E998)
ASTM E331	Standard test method for water penetration of exterior windows, skylights, doors, and curtain walls by uniform static air pressure difference
ASTM E546	Standard test method for frost/dew point of sealed insulating glass units (except E77)
ASTM E547	Standard test method for water penetration of exterior windows, skylights, doors, and curtain walls by cyclic static air pressure difference (except E631)
ASTM E576	Standard test method for frost/dew point of sealed insulating glass units in the vertical position (except E77)
ASTM E773-01 (Withdrawn 2010) ²	Standard test method for accelerated weathering of sealed insulating glass units
ASTM E774-97 (Withdrawn 2006) ²	Standard specification for the classification of the durability of sealed insulating glass units (except E1887)
ASTM E783 ¹	Standard test method for field measurement of air leakage through installed exterior windows and doors
ASTM E894	Standard test method for anchorage of permanent metal railing systems and rails for buildings (except E488)
ASTM E907-96 (Withdrawn 2013) ^{1,2}	Standard test method for field testing uplift resistance of adhered membrane roofing systems
ASTM E935	Standard test methods for performance of permanent metal railing systems and rails for buildings
ASTM E985	Standard specification for permanent metal railing systems and rails for buildings
ASTM E987	Standard test methods for deglazing force of fenestration products
ASTM E997	Standard test method for evaluating glass breakage probability under the influence of uniform static loads by proof load testing
ASTM E1017	Standard specification for generic performance requirements for exterior residential window assemblies



<u>Test Method:</u>	<u>Test Description:</u>
ASTM E1105 ¹	Standard test method for field determination of water penetration of installed exterior windows, skylights, doors, and curtain walls, by uniform or cyclic static air pressure difference
ASTM E1233/E1233M	Standard test method for structural performance of exterior windows, doors, skylights, and curtain walls by cyclic air pressure differential
ASTM E1424	Standard test method for determining the rate of air leakage through exterior windows, curtain walls, and doors under specified pressure and temperature differences across the specimen
ASTM E1592	Standard test method for structural performance of sheet metal roof and siding systems by uniform static air pressure difference
ASTM E1677	Standard specification for air barrier (AB) material or system for low-rise framed building walls
ASTM E1748	Standard Test Method for Evaluating the Engagement Between Windows and Insect Screens as an Integral System
ASTM E2068	Standard test method for determination of operating force of sliding windows and doors
ASTM E2188	Standard test method for insulating glass unit performance
ASTM E2189	Standard test method for testing resistance to fogging in insulating glass units
ASTM E2190	Standard specification for insulating glass unit performance and evaluation (except C1265)
ASTM E2273	Standard test method for determining the drainage efficiency of exterior insulation and finish systems (EIFS) clad wall assemblies
ASTM E2353	Standard test methods for performance of glazing in permanent railing systems, guards, and balustrades (except ASTM standard E2025)
ASTM E2357	Standard test method for determining air leakage of air barrier assemblies
ASTM E2358	Standard specification for the performance of glass in permanent glass railing systems, guards, and balustrades (except ASTM standard E2025)
ASTM E2485/E2485M	Standard test method for freeze/thaw resistance of exterior insulation and finish systems (EIFS) and water resistive barrier coatings
ASTM E2486/E2486M	Standard test method for impact resistance of class PB and PI exterior insulation and finish systems (EIFS)
ASTM E2568	Standard specification for PB exterior insulation and finish systems (except E2486, E119, E2134, B117 and NFPA 285)
ASTM E2570	Standard test methods for evaluating water-resistive barrier (WRB) coatings used under exterior insulation and finish systems (EIFS) or EIFS with drainage (except E2134 and AATCC 127)
ASTM E2649	Standard test method for determining argon concentration in sealed insulating glass units using spark emission spectroscopy
ASTM F588	Standard test methods for measuring the forced entry resistance of window assemblies, excluding glazing impact (except glazing impact)
ASTM F842	Standard test methods for measuring the forced entry resistance of sliding door assemblies, excluding glazing impact (except glazing impact)
ASTM F1233	Standard test method for security glazing materials and systems (except ballistic testing)
BS EN 14179-1	Glass in building - heat soaked thermally toughened soda lime silicate safety glass - definition and description (section 10)

<u>Test Method:</u>	<u>Test Description:</u>
CAN/CGSB 12.1	Safety Glazing (except hardness and natural weathering)
CAN/CGSB 12.8-M	Insulating glass units
CAN/CSA-A440.2	Fenestration energy performance
CAN/ULC S716.1 ³	Standard for exterior insulation and finish systems (EIFS) – materials and systems (except Ash, IR, Fungus and Salt Spray) ²
CAN/ULC S742	Standard for air barrier assemblies – specification
CPSC 16 CFR 1201	Commercial practices - safety standard for architectural glazing materials
CSA A123.21	Standard test method for the dynamic wind uplift resistance of membrane-roofing systems
CSSBI 12M	Standard for composite steel deck
ICC ES AC39	Walking decks (test methods referenced in sections 3.0 and 4.0 except 4.2.6, 4.3.5, 4.1.11, 4.3.11, 4.1.13, 4.3.14, 4.4)
ICC ES AC174	Deck board span ratings and guardrail systems
NFRC 100	Procedure for determining fenestration product u-factors
NFRC 101	Procedure for determining thermophysical properties of materials for use in NFRC-approved software
NFRC 200	Procedure for determining fenestration product solar heat gain coefficient and visible transmittance at normal incidence
NFRC 400	Procedure for determining fenestration product air leakage
NFRC 500	Procedure for determining fenestration product condensation resistance values
NFRC 501	User guide to the procedure for determining fenestration product condensation resistance rating value
Physical Characterization:	
ASTM C67	Standard test methods for sampling and testing brick and structural clay tile
ASTM C165	Standard test method for measuring compressive properties of thermal insulations (except for E4, E177 and E240)
ASTM C272/C272M	Standard test method for water absorption of core materials for sandwich constructions (except C271)
ASTM C297/C297M	Standard test method for flatwise tensile strength of sandwich constructions (except D3039/D3039M, C792, D2734, D3171, D5229/D5229M and E4)
ASTM C367/C367M	Standard test methods for strength properties of prefabricated architectural acoustical tile or lay-in ceiling panels
ASTM C393	Core Shear Properties of Sandwich Constructions
ASTM C473	Standard test methods for physical testing of gypsum panel products (except D3285 and E4)
ASTM C1028	Standard test method for determining the static coefficient of friction of ceramic tile and other like surfaces by the horizontal dynamometer pull-meter method
ASTM C1185	Standard test methods for sampling and testing non-asbestos fiber-cement flat sheet, roofing and siding shingles, and clapboards



<u>Test Method:</u>	<u>Test Description:</u>
ASTM C1382	Standard test method for determining tensile adhesion properties of sealants when used in exterior insulation and finish systems (EIFS) joints (except C1135)
ASTM C1396/C1396M	Standard specification for gypsum board (except D3272 and E119)
ASTM D1037	Standard test methods for evaluating properties of wood-base fiber and particle panel materials (except C273, D143, D905, D2395, D3043, D3363, D3501 and E4)
ASTM D1970/D1970M	Standard specification for self-adhering polymer modified bituminous
ASTM D4073	Standard test method for tensile-tear strength of bituminous roofing membranes
ASTM D4216	Standard specification for rigid poly (vinyl chloride) (PVC) and related PVC and chlorinated poly (vinyl chloride) (CPVC) building products compounds
ASTM D4226	Standard test methods for impact resistance of rigid poly (vinyl chloride) (PVC) building products (except D178 and D374)
ASTM D4434/D4434M	Standard specification for poly (vinyl chloride) sheet roofing (except ASTM standards D5602 and D5635)
ASTM D4495	Standard test method for impact resistance of poly (vinyl chloride) (PVC) rigid profiles by means of a falling weight
ASTM D4541	Standard test method for pull-off strength of coatings using portable adhesion testers
ASTM D5147/D5147M	Standard test methods for sampling and testing modified bituminous sheet material (except ASTM standards D95, D146, D4977, and D5636)
ASTM D5206	Standard test method for windload resistance of rigid plastic siding
ASTM D5385/D5385M	Standard test method for hydrostatic pressure resistance of waterproofing membranes
ASTM D6109	Standard test methods for flexural properties of unreinforced and reinforced plastic lumber and related products (except D5947)
ASTM D6662	Standard specification for polyolefin-based plastic lumber decking boards (except D6112, D6341 and E108)
ASTM D7031	Standard guide for evaluating mechanical and physical properties of wood-plastic composite products (except C1308, D1413, D143, D2017, D2047, D2394, D2395, D2481, D3345, D4442, D4761, D5379, D5764, E108 and F1679, AWWA standards E1, E7 and E10)
ASTM D7032	Standard specification for establishing performance ratings for wood-plastic composite and plastic lumber deck boards, stair treads, guards, and handrails (except D198, D1413, D2017, D2047 D2394, D3345, D4761, D5764, E108, and F1679)
ASTM E661	Standard test method for performance of wood and wood-based floor and roof sheathing under concentrated static and impact loads
ASTM E2098/E2098M	Standard test method for determining tensile breaking strength of glass fiber reinforcing mesh for use in class PB exterior insulation and finish systems (EIFS), after exposure to a sodium hydroxide solution
ASTM E2134	Standard test method for evaluating the tensile-adhesion performance of an exterior insulation and finish system (EIFS)
ASTM E2178	Standard test method for air permeance of building materials

<u>Test Method:</u>	<u>Test Description:</u>
ASTM E2321	Standard practice for use of test methods for determining the water vapor transmission (WVT) of exterior insulation and finish systems (EIFS)
ASTM E2322	Standard test method for conducting transverse and concentrated load tests on panels used in floor and roof construction
ASTM E2359/E2359M ¹	Standard test method for field pull testing of an in-place exterior insulation and finish system clad wall assembly
ASTM F137	Standard test method for flexibility of resilient flooring materials with cylindrical mandrel apparatus
ASTM F386	Standard test method for thickness of resilient flooring materials having flat surfaces
ASTM F970	Standard test method for static load limit (except F1914 and F387)
ASTM F1066	Standard specification for vinyl composition floor tile (except ASTM standards F925, F1265, F1304, F1514, F1914, F2055, F2199 and ANSI/ASQC)
ASTM F1303	Standard specification for sheet vinyl floor covering with backing
ASTM F1344	Standard specification for rubber floor tile (except ASTM standards D2240, D3389, F373, F410, F511, F925, F1484, F1514, F2055, F2199 and ANSI/ASQC Z1.4)
ASTM F1700	Standard specification for solid vinyl floor tile (except ASTM standards F373, F925, F1514, F1515, F1914, F2055, F2199 and ANSI/ASQC Z1.4)
ASTM F1913	Standard specification for vinyl sheet floor covering without backing (except ASTM standards F410, F925, F1514, F1515, F1914; ANSI/ASQC Z1.4)
BS EN 12430	Thermal insulating products for building applications - determination of behaviour under point load
CAN/CGSB 37.54-M	Polyvinyl chloride roofing and waterproofing membrane (except ASTM standards G53, and D1790)
CAN/CGSB 37.58-M	Membrane, elastomeric, cold-applied liquid, for non-exposed use in roofing and water proofing
CAN/CGSB 41.24	Rigid vinyl siding - soffits and fascia
CAN/CGSB 51.32	Sheathing - membrane, breather type (except ASTM standard D828)
CAN/CGSB 51.33-M	Vapour barrier sheet, excluding polyethylene, for use in building construction (except ASTM standard D1709 and ISO 1923)
CAN/CGSB 51.34-M	Vapour barrier - polyethylene sheet for use in building construction (except ASTM standard D1709, and ISO 1923)
CAN/CSA-A82.20.2-M	Physical Testing of Gypsum and Gypsum Plasters
CAN/CSA A370	Connectors for masonry
CAN/ULC S741	Standard for air barrier materials – specification
CGSB 37-GP-52M	Roofing and waterproofing membrane, sheet applied, elastomeric (except ASTM standard D3041)
CGSB 37-GP-54M	Roofing and waterproofing membrane - sheet-applied – flexible - polyvinyl chloride standard
CGSB 37-GP-56M	Membrane, modified, bituminous, prefabricated, and reinforced for roofing (except sections 7.2.6 and 7.2.10)

<u>Test Method:</u>	<u>Test Description:</u>
CGSB 75.1-M88	Tile - ceramic (section 7.2.7, Fed. spec. L-F-001641)
ICC ES AC38	Water-resistive barriers (test methods referenced in sections 3.3.4)
ICC ES AC48	Self-adhered roof underlayment-for use as ice barriers (test methods referenced in section 4.0)
ICC ES AC71	Foam plastic sheathing panels used as weather-resistive barriers (test methods referenced in section 3.0)
ICC ES AC114	Rigid polyethylene, below-grade, damp proofing and wall waterproofing material (test methods referenced in section 4.0)
ICC ES AC168	Unplasticized Poly Vinyl Chloride (UPVC) Siding with an Expanded Cellular Core and Rigid Facing (Test methods referenced in section)
ICC ES AC310	Water-resistive membranes factory-bonded to wood-based structural sheathing, used as water-resistive barriers (test methods referenced in section 4)
ICC ES AC342	Vapor permeable membrane used with concealed attics and roof spaces (test methods referenced in section 3.0)
Thermal Properties	
ASTM C209	Standard test methods for cellulosic fiber insulating board (except C177 and C1114)
ASTM C335/C335M	Standard test method for steady-state heat transfer properties of pipe insulation (except C177, C250 and ISO 8497)
ASTM C356	Standard test method for linear shrinkage of preformed high-temperature thermal insulation subjected to soaking heat (except C210)
ASTM C411	Standard test method for hot-surface performance of high-temperature thermal insulation
ASTM C421	Standard test method for tumbling friability of preformed block-type and preformed pipe-covering-type thermal insulation
ASTM C447	Standard practice for estimating the maximum use temperature of thermal insulations (except C177 and C1621)
ASTM C518	Standard test method for steady-state thermal transmission properties by means of the heat flow meter apparatus (except C177, C236, C976 and C1114, and ISO 8301)
ASTM C520	Standard test methods for density of granular loose fill insulations
ASTM C533	Standard specification for calcium silicate block and pipe thermal insulation (except C177, C795, C1114, C1616 and C1617)
ASTM C534/C534M	Standard specification for preformed flexible elastomeric cellular thermal insulation in sheet and tubular form (except C177, C692, C871 and C1114)
ASTM C547	Standard specification for mineral fiber pipe insulation (except C177, UL 723 and NFPA 255)
ASTM C553	Standard specification for mineral fiber blanket thermal insulation for commercial and industrial applications (except C177, C1114 and C1617)
ASTM C578	Standard specification for rigid, cellular polystyrene thermal insulation
ASTM C591	Standard specification for unfaced preformed rigid cellular polyisocyanurate thermal insulation (except C177, C871, C1114 and D2856)

<u>Test Method:</u>	<u>Test Description:</u>
ASTM C592	Standard specification for mineral fiber blanket insulation and blanket-type pipe insulation (metal-mesh covered) (industrial type)
ASTM C610	Standard specification for molded expanded perlite block and pipe thermal insulation (except C177)
ASTM C612	Standard specification for mineral fiber block and board thermal insulation (except C177, C1338 and C1617)
ASTM C653	Standard guide for determination of the thermal resistance of low-density blanket-type mineral fiber insulation (except C177 and C1114)
ASTM C656	Standard specification for structural insulating board, calcium silicate (except C177)
ASTM C665	Standard specification for mineral-fiber blanket thermal insulation for light frame construction and manufactured housing (except C177)
ASTM C687	Standard practice for determination of thermal resistance of loose-fill building insulation (except C177 and C1114)
ASTM C726	Standard specification for mineral wool roof insulation board (except C177, D482, E2058 and ISO 1716)
ASTM C764	Standard specification for mineral fiber loose-fill thermal insulation
ASTM C991	Standard specification for flexible fibrous glass insulation for metal buildings (except C177 and C1258)
ASTM C1029	Standard specification for spray-applied rigid cellular polyurethane thermal insulation (except C177, C236 and D2856)
ASTM C1101/C1101M	Standard test methods for classifying the flexibility or rigidity of mineral fiber blanket and board insulation
ASTM C1104/C1104M	Standard test method for determining the water vapor sorption of unfaced mineral fiber insulation
ASTM C1289	Standard specification for faced rigid cellular polyisocyanurate thermal insulation board
ASTM C1303/C1303M	Standard test method for predicting long-term thermal resistance of closed-cell foam insulation
CAN/CGSB 4.2 No. 78.1	Textile test methods - thermal protective performance of materials for clothing
CAN/ULC S701	Standard for thermal insulation, polystyrene, boards and pipe covering (except ASTM standard C177)
CAN/ULC S702	Standard for mineral fibre thermal insulation for buildings (except C177 and CAN/ULC S129)
CAN/ULC S703	Standard for cellulose fibre insulation (CFI) for buildings (except ASTM standard C177, and CAN/ULC S 130)
CAN/ULC S704	Standard for thermal insulation, polyurethane and polyisocyanurate, boards, faced (except C177, C1114 and D3985)
CAN/ULC S705.1	Standard for thermal insulation - spray applied rigid polyurethane foam, medium density - material - specification (except C177 and D2856)
CAN/ULC S705.2	Standard for thermal insulation - spray applied rigid polyurethane foam, medium density - installer's responsibility - specification
CAN/ULC S706	Standard for wood fibre insulating boards for buildings (except CAN/ULC S773)
CAN/ULC S710.1	Standard for thermal insulation – bead-applied one component polyurethane air sealant foam - part 1: material specification
CAN/ULC S710.2	Standard for thermal insulation – bead-applied one component polyurethane air sealant foam - part 2: installation

<u>Test Method:</u>	<u>Test Description:</u>
CAN/ULC S711.1	Standard for thermal insulation – bead-applied two component polyurethane air sealant foam - part 1: material specification (except C177 and E514)
CAN/ULC S711.2	Standard for thermal insulation – bead-applied two component polyurethane air sealant foam – part 2: installation
CAN/ULC S712.1	Standard for thermal insulation - light density - open cell spray applied semi-rigid polyurethane foam - material specification
CAN/ULC S743.1	STANDARD FOR THERMAL INSULATION – LOW PRESSURE APPLIED TWO COMPONENT SPRAY POLYURETHANE FOAM, PART 1: MATERIAL SPECIFICATION
CAN/ULC S770	Standard test method for determination of long-term thermal resistance of closed-cell thermal insulating foams
ICC ES AC02	Reflective insulation (test methods referenced in sections 3.0)
ICC ES AC12	Foam plastic insulation (test methods referenced in sections 3.0 and 4.0, except E119 and UL standard 263)
ICC ES AC187	Polyester loose-fill and blanket insulations (test methods referenced in sections 3.0 and 4.0)
ICC ES AC263	Prefabricated duct fitting insulation manufactured from molded, expanded polystyrene foam plastic (test methods referenced in section 3.0)
ICC ES AC377	Spray-applied foam plastic insulation (test methods referenced in section 3.0)
MIL-I-2781F	Specification: insulation – pipe – thermal

¹ This laboratory’s scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered “historical” and not that the laboratory’s accreditation for the method has been withdrawn.

² Exception methods for CAN/ULC S716.1 performed at other ISO/IEC 17025 accredited Element locations.

³ This laboratory performs field testing activities for these tests AAMA 503, ASTM E783, ASTM E907-96 (Withdrawn 2013), ASTM E1105, ASTM E2359/E2359M



Accredited Laboratory

A2LA has accredited

ELEMENT MATERIALS TECHNOLOGY CANADA INC.

Mississauga, Ontario, Canada

for technical competence in the field of

Construction Materials Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 2nd day of March 2023.

A blue ink signature of Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 6524.01
Valid to October 31, 2024

For the tests to which this accreditation applies, please refer to the laboratory's Construction Materials Scope of Accreditation.